IN THE CLAIMS

1. (previously amended) A method for error detection and correction (EDC) in transferring data in a packet of bytes from a memory module to a requesting device comprising the steps of:

defining each byte of the packet to have an EDC code portion and a data portion, wherein each EDC code portion is a distributed portion of a complete EDC code;

storing said data portion and said EDC code portion of each byte of the packet in the memory module;

reading out said data portion and said EDC code portion of each byte of the packet from said memory module;

forwarding said data portion of each byte of the packet read from the memory module to said requesting device;

storing said EDC portion of each byte of the packet read from the memory module, and sending each said EDC portion to an EDC functional block when the ~~a~~ complete EDC code is obtained;

copying said data portion of each byte of the packet read from the memory module, and sending each said data portion to said EDC functional block; and

performing error checking and correction in said EDC functional block when said EDC functional block receives the complete EDC code.

2. (previously amended) A method as in claim 1, further comprising the following steps when an error is

detected in said EDC functional block:

setting a flag and correcting said data;

writing the correct data back to said memory module; and

generating an interrupt to said requesting device for a later retransmission.

3. (original) A method as in claim 1, wherein each byte of a packet has 8 bits of data and 1 bit of a 8 bit EDC code and said EDC code is distributed among 8 bytes of each packet.

4. (original) A method as in claim 1, wherein said forwarding of said data portion will not begin until an entire packet is received and said entire packet is checked and corrected for error.

5. (canceled)

6. (canceled)

7. (canceled)

8. (canceled)

9. (canceled)

10. (canceled)

11. (canceled)